Morse, Bob

From: Morse, Bob
Sent: Friday, August 26, 2016 5:34 PM
To: 'FARNSWORTH, DAVID S GS-13 USAF HAF AFCEC/CIBE'
Cc: Pocze, Doug; Bishop, Heather L (DEC)
Subject: EPA Comments on the Griffiss AFB - draft Installation Specific PFC SI Work Plan and QPP

Dave,

EPA has reviewed the Griffiss AFB - draft Installation Specific PFC SI Work Plan and QPP. EPA comments are presented below.

Please let me know if you have any questions regarding these comments. Thank you.

Bob

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Hydrogeology Comments

General Comments:

1) Overall, the proposed sampling depths and monitoring well installation details are acceptable.

2) Do the USTs and ASTs on site regularly undergo tightness tests? This may be useful to do concurrently with sampling the contents of each tank to determine any weaknesses in the tanks as preventative maintenance.

Specific Comments:

3) **Worksheet #17-05 (pg 93):** Will the 2-2,000 gallon ASTs in the building be inspected (or any confirmatory borings installed) to investigate potential releases, or are these tanks in good condition?
4) **Worksheet #17-09, Condition 1 (pg 149):** The figure indicates a proposed soil boring location south of the septic (SB/MW09001), but this point is not discussed in the text. Please discuss. Additionally, it is unclear whether MW09001 will be installed whether or not existing well AOC9TW-65 is present.
5) **Worksheet #17-14 (pg 199):** Figure 14-2 indicates that 2 monitoring wells (MW-14004 and 14005) will be installed, but the text only indicates one (the wording is unclear). Please add that only 2 samples will be collected from each soil boring in the Holding and Dry Ponds (SB14006, 14007, and 14008).
6) **Worksheet #10-15 (pg 211):** The physical profile section describes depth to groundwater ranging from both 10-15 ftbgs and 15-20 ftbgs. Probably a typo, please clarify.
7) **Worksheet #17-15 (pg 213):** It is unclear how this investigation will address the primary goal of the SI (presence or absence of PFCs). Will any investigative borings be collected from this area? Will the contents of the potential sewer be sampled?

8) **Worksheet #10-18 (pg 231):** How deep is the landfill in Area 18? How deep are the "final grading" soils that may be impacted by PFCs? Why are no surface soil samples proposed for this location, if that is the likely source in the area?
9) **Worksheet #17-20, Condition 1 (pg 257):** Please specify in the text that of the 2 proposed samples, 1 will be co-located surface water and sediment, and 1 will be co-located stormwater and sediment. It is clear in the figure, but unclear in the text.

   An explanation is needed as to why there are no groundwater monitoring points proposed between the confirmed PFC contamination in this area and the Mohawk River.

Human Health Risk Comments

1. The document appears to indicate that groundwater will not be evaluated since a public water supply is available and groundwater exposure / pathway is not mentioned, e.g., page 37 Worksheet # 10-01 under the Land Use and Human Exposure Profile column. Consistent with guidance, exposure to groundwater must be evaluated as a potential future use / exposure pathway and this should be stated in the workplan and included in the human health risk assessment.
2. The document identifies a number of exposure pathways in the Table 10 series without identifying the routes of exposure. In some cases, the pathways are identified, while in other cases pathways are not listed. It is important to identify the exposures pathways to assure that samples are collected at the appropriate depths and the CSM identifies completed exposure pathways under current and future land use considerations.
3. The introductory information indicates that future iterations of this work plan will adopt the new Health Advisory values as comparison thresholds. In addition, any updates to Agency guidance on the evaluation of the toxicity of PFCs will need to be considered in the development of the workplan for the HHRA.
4. The document indicates on Worksheets Series #18 the planned sampling approach. In finalizing these workplans, considering the ubiquitous use of PFCs in various materials it is important to consider methods for avoiding possible cross contamination during sampling.

QPP Comments

EPA did not re-review the QPP as it is our understanding that it is identical to the one provided for Plattsburgh AFB. Comments are provided below for use / reference.

Comments will reference the April 20016 Quality Program Plan for PFC Release at Multiple USAF BRAC installations as the BRAC QPP and to the Griffiss ISWPA as the Griffiss QAPP.

The following comments reference the worksheets that present the information required by the UFP-QAPP guidance. If the information is present in the Work Plan/QAPP it will be so stated.

PROJECT MANAGEMENT and OBJECTIVES ELEMENTS

1. Worksheet #1 & 2 – This information was provided in the QAPP and addressed the requirements.

2. Worksheet #3 & 5 – This information was provided in the QAPP and addressed the requirements.

3. Worksheet #4, 7 & 8 – This information was provided in the QAPP and addressed the requirements.

4. Worksheet #6 – This information was provided in the QAPP and addressed the requirements.

5. Worksheet #9 – This information was provided in the QAPP and addressed the requirements.

6. Worksheet #10 – This information was provided in the QAPP and addressed the requirements.

7. Worksheet #11 – This information was provided in the QAPP and addressed the requirements.

8. Worksheet #12 – This information was provided in the QAPP and addressed the requirements.

9. Worksheet #13 – This information was provided in the QAPP and addressed the requirements.

10. Worksheet #14 & 16 – This information was provided in the QAPP and addressed the requirements.

MEASUREMENT/DATA ACQUISITION ELEMENTS

11. Worksheet #15

Page 48 of the BRAC QPP – EPA has updated the Health Advisory (HA) for drinking water to 70 ppt. All worksheets referencing the previous preliminary HA should be revised to account for this.

12. Worksheet #17 – This information was provided in the QAPP and addressed the requirements.

13. Worksheet #18 – This information was provided in the QAPP and addressed the requirements.

14. Worksheet #19 & 30

Page 65 of the BRAC QPP

- EPA has only recognized Method 537 for drinking water. The modification for its use for solid matrices should be fully validated and documented. In addition, please clarify that the laboratory's accreditation is valid for the modified method for use in solid matrices.
- Please clarify that the laboratories are certified for the PFC analyses.

15. Worksheet #20

Griffiss QAPP – Due to the multiple sources of potential sample contamination during sampling for PFCs, it is suggested that Field Blanks be taken at a frequency of one per site per day.

Section 2 of the Griffiss QAPP

- An estimate of the field and equipment laboratories should be provided and included in the total samples that will be sent to the laboratory.
- Several sites show no Field Duplicate taken for some matrices. A minimum of one Field Duplicate should be taken for each matrix at each site.

16. Worksheet #21 – This information was provided in the QAPP and addressed the requirements.

17. Worksheet #22 – This information was provided in the QAPP and addressed the requirements.

18. Worksheet #23 – This information was provided in the QAPP and addressed the requirements.

19. Worksheet #24 – This information was provided in the QAPP and addressed the requirements.

20. Worksheet #25 – This information was provided in the QAPP and addressed the requirements.

21. Worksheet #26 & 27 – This information was provided in the QAPP and addressed the requirements.

22. Worksheet #28

BRAC QPP – Field QC samples should be included in this worksheet.

23. Worksheet #29 – This information was provided in the QAPP and addressed the requirements.

ASSESSMENT/OVERSIGHT ELEMENTS

24. Worksheet #31, 32 & 33 – This information was provided in the QAPP and addressed the requirements.

DATA REVIEW ELEMENTS

25. Worksheet #34 – This information was provided in the QAPP and addressed the requirements.

26. Worksheet #35 – This information was provided in the QAPP and addressed the requirements.

27. Worksheet #36

BRAC QPP – Measurement performance criteria is also listed in Worksheet # 28. Worksheet # 15 could also be needed for data validation. Please clarify.

28. Worksheet #37

The data usability process is the evaluation that takes place after data validation is completed, to determine if the data is of enough quantity and quality to meet project goals. As shown on Optimized Worksheet # 37, this worksheet should describe how the EPA 5 step data usability process will be applied for this project.

Ecological Risk Comments

Ideally at least one surface water and sediment sample should be collected from each area which is in proximity to a water body. The sample location should reflect either a point which receives surface runoff or a groundwater discharge area. Depositional areas are also preferable. At area(s) of concern where there are discharge pipes identified, EPA requests that samples upgradient and downgradient of this / these points be collected.

End of Comments